



Teacher Strategies in Developing Nature Based Inclusive Learning to Realize Equitable Education

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Abstract

This study aims to analyze teachers' strategies in developing nature-based inclusive learning to realize equitable education at MIS Bilingual Al-Ikhlash Kepanjen, Malang Regency. The research employs a qualitative approach with a descriptive study design. Data were collected through participatory observation, in-depth interviews, and documentation, and were analyzed interactively through the stages of data reduction, presentation, and conclusion drawing. The findings reveal that teachers' strategies in nature-based inclusive learning consist of three main stages: collaborative planning, adaptive implementation, and personal mentoring. Teachers apply learning by doing, scaffolding, and experiential learning models to foster students' active participation, empathy, and social responsibility, including for children with special needs (CWSN). The school's policy support based on the Index for Inclusion framework and the involvement of parents strengthen the implementation of a humanistic and equitable education practice. However, the implementation of these strategies still faces challenges such as limited disability-friendly facilities, curriculum integration, and the readiness of teachers and special education assistants (GPK) in conducting outdoor learning activities. This study recommends the development of teacher training models and community collaboration to support the sustainability of nature-based inclusive learning in elementary schools.

Keywords:

Inclusive Learning; Nature-Based Learning; Teacher Strategy; Educational Equity; Social Inclusion

A. INTRODUCTION

Inclusive education in Indonesia is currently being widely promoted for implementation in both public and private schools. The number of formally recognized inclusive schools has increased significantly (Septiano & Sasono, 2025). Inclusive education has become a national policy that upholds the principle that every child has the right to receive education without discrimination. However, inclusive education in Indonesia still faces both structural and cultural challenges. In practice, there remains an inequality in the quality of education between regular schools and inclusive schools, particularly in rural areas (Ainscow, 2020). The lack of teacher competence, limited supporting facilities, and low public awareness of the importance of inclusive education further exacerbate this inequality (Septiano et.al., 2025). In addition, social stigma and the school environment's attitudes that have not yet fully embraced student diversity serve as additional barriers (Komarudin & Kaeni, 2023). This condition indicates that education in Indonesia has not yet become fully equitable and inclusive, particularly in the context of teachers' instructional strategies.

Theoretically, inclusive education requires differentiated instruction, collaboration, and the adaptation of the learning environment so that all students can develop optimally (Kelly et al., 2022). However, there remains a concerning gap between children with disabilities and their

peers, including reduced friendships, lower levels of peer acceptance, and greater social isolation during playtime (Danniels & Pyle, 2023). As a result, the learning process often becomes non-inclusive, limiting the creativity of students with special needs and failing to create equality in learning experiences (Sommerfeld, 2021). This serves as a reminder to all stakeholders working in the field of inclusion that the ultimate goal of inclusive education is to ensure that students have equal rights to education and become equal members of society who are actively involved in social life (Vidal-Esteve & Kossvaki, 2024). In Indonesia, inclusive education has not yet fully reached this stage. Consequently, some schools are striving to integrate inclusive education with outdoor learning activities to teach students about social life and the natural environment. Although such integrative approaches are still rarely implemented in Indonesia, nature-based approaches have the potential to foster active student participation.

Several previous studies have shown the great potential of nature-based learning within the inclusive education context. Knight et al. (2025) found that nature-based learning enhances teacher well-being while creating a more inclusive learning environment. Studies conducted in Europe and the United States also revealed that nature-based approaches can foster social empathy, collaborative skills, and environmental awareness (Jardinez & Natividad, 2024). Namun demikian, sebagian besar penelitian tersebut dilakukan di negara maju dengan konteks pendidikan yang sudah inklusif secara sistemik (Jordan & Chawla, 2019; Kelly et al., 2022). Di Indonesia, penelitian serupa masih terbatas dan belum banyak menyoroti strategi konkret guru dalam mengimplementasikan pembelajaran inklusif berbasis alam.

The research gap lies in the lack of studies that specifically examine teachers' strategies in developing nature-based inclusive learning in the context of Indonesian education. Most previous studies have focused on conceptual aspects, infrastructure and curriculum challenges, and the impact on students, rather than on teachers' strategies in designing, implementing, and evaluating such learning (Ainscow, 2020; Wang et al., 2025). In fact, teachers are the main agents in building a culture of inclusion and determining the extent to which the principle of justice can be implemented in the classroom (Kelly et al., 2022). In addition, there have not been many studies that integrate the perspective of social justice education for students with special needs with a nature-based approach in inclusive schools, especially in the context of madrasah education (Knight et al., 2025). Therefore, this study aims to fill this gap by analyzing how teachers' strategies in developing effective nature-based inclusive learning in the context of education in one of the schools in Malang Regency, Indonesia.

This study contributes to providing conceptual models and empirical practices for teachers in developing nature-based inclusive learning as a form of implementing equitable education. The results of this study are expected to strengthen teachers' capacity to design learning that is adaptive to students' needs, while fostering ecological awareness and social empathy (Jordan & Chawla, 2019). For educational institutions, this research can serve as a basis for policy development and professional training for inclusive teachers. Furthermore, nature-based inclusive learning is expected to not only improve student learning outcomes but also strengthen social justice and environmental sustainability in the community. Therefore, the role of teachers in realizing inclusive education, which is currently still a challenge in this country, is very important (Knight et al., 2025). Thus, this study provides significant theoretical, practical, and social contributions in strengthening the direction of inclusive and equitable education in Indonesia.

B. METHODS

This study employs a qualitative approach with a descriptive research design. According to (Sugiyono, 2013), qualitative research is conducted in a natural setting where the researcher serves as the key instrument. This approach was chosen to provide an in-depth description of teachers' strategies in developing nature-based inclusive learning aimed at achieving equitable education. It allows the researcher to understand the phenomenon holistically.

This study was conducted at a private school in Malang Regency, East Java, Indonesia. The research location was selected based on the criteria of schools that have implemented inclusive

schools that accept students with special needs and integrate learning in a nature-based learning model. Informants in this study were selected using purposive sampling to obtain concrete results from various parties directly involved in the implementation of nature-based inclusive education. There were a total of 22 informants, including the principal, vice principal for curriculum, 5 classroom teachers, 3 special guidance teachers (GPK), 4 parents, and 8 students at schools that implement nature-based inclusive learning models.

Data were collected through participatory observation, in-depth interviews, and documentation to obtain comprehensive information regarding the strategies, practices, and challenges faced by teachers (Ardiansyah et al., 2023). Data analysis was carried out interactively through the stages of data collection, data reduction, data display, and conclusion drawing (Michael Huberman et al., 2014). The validity of the data was ensured through source and technique triangulation, thereby enhancing the credibility and scientific accountability of the study's findings.

C. RESULT & DISCUSSION

Inclusive education represents the latest development in educational models for children with special needs, providing opportunities for them to learn together without regard to differences or individual difficulties (Ermawati, 2008). The main goal of inclusive education is to maximize the potential of students with special needs so that they can fully participate in school life (Saadati & Sadli, 2019).

The concept of nature-based schooling is a classroom approach that allows students to explore and experiment directly in nature (Haryanti, 2020). Through direct interaction with the natural environment, students gain contextual learning experiences that ultimately promote joyful learning, social awareness, empathy, and a sense of responsibility toward others and the environment (Laksita et al., 2025).

The concept of nature-based inclusive learning is a form of pedagogical innovation that integrates the principles of inclusivity with learning experiences derived from students' surrounding environments. This model not only emphasizes equal access to education but also recognizes and values the diversity of students' abilities, potentials, and backgrounds. Substantively, this concept aligns with the goals of equitable education, which seeks to provide equal learning opportunities for all students while taking into account their individual needs (Parnawi & Syahrani, 2024).

From the perspective of critical pedagogy, Paulo Freire argues that such learning represents a process of humanizing education, where students are no longer passive objects of instruction but become active subjects who construct knowledge through experience and social reflection (Darwis, 2016). In this study, the concept of nature-based inclusive learning emerges from the integration of three core educational principles: nature-based education (school of nature), inclusive education, and equitable education. These three share the same orientation forming individuals who are character-driven, critical thinkers, and socially and environmentally conscious.

Essentially, a school of nature is an educational institution that utilizes the environment as its main learning resource. This model is based on the idea that nature serves as a living laboratory rich in values, where students can learn through direct experience, exploration, and reflection (Candra, 2025). According to Kolb's experiential learning theory, learning becomes more meaningful when learners actively engage in concrete experiences and reflect upon them to construct knowledge (Hikmatunnisa et al., 2024). In this context, nature-based schools function not merely as academic learning spaces but also as arenas for character formation, moral growth, and the development of social empathy through environmental interaction (Anam, 2025).

Meanwhile, inclusive education is an approach that ensures every child regardless of physical, intellectual, or social barriers has an equal opportunity to learn within the general education environment. The foundational principle of inclusivity is rooted in Booth and Ainscow's *Index for Inclusion*, which asserts that inclusive schools must foster cultures, policies, and practices that respect diversity and encourage the active participation of all students (Nadhiroh & Ahmadi,

2024). Inclusive education rejects all forms of discrimination and regards each learner as a unique subject with distinct needs.

Equitable education, on the other hand, emphasizes the principle of equity—providing differentiated support according to each student’s needs to ensure equal opportunities for growth (Riswanto, 2025). This differs from equality, which gives everyone the same treatment regardless of circumstance. The nature-based inclusive approach aligns with the equity in education principle as defined by the OECD, which states that educational fairness does not mean offering identical opportunities to all students, but rather providing support based on their specific needs so that every child can thrive (Iswahyudi, 2023).

Justice in education is achieved when the educational system ensures that social, economic, or physical backgrounds do not hinder students’ learning success (Hendayati et al., 2025). Within this framework, the teacher acts as a facilitator, ensuring that all students including those with special needs can participate fully in the learning process. The natural environment becomes an open learning space that promotes equal experiences, where students learn through their senses, direct interaction, and social cooperation (Zulfriman et al., 2024).

The findings of the study show that teachers’ strategies in developing nature-based inclusive learning consist of three main stages: collaborative planning, adaptive implementation, and personal mentoring. In the planning stage, teachers design thematic lesson plans (RPP) by integrating outdoor activities that are relevant to the learning materials. This process is carried out collaboratively, involving the principal, teachers, and parents to ensure that nature-based activities are accessible to all students, including those with physical or cognitive limitations. This step aligns with the perspective of Booth and Ainscow in the *Index for Inclusion*, which emphasizes that inclusive learning planning should foster school policies, cultures, and practices that value diversity and promote the active participation of every student (Kurniawan, 2025).

To illustrate the implementation of nature-based inclusive learning in the madrasah, the following table presents the teachers’ strategies along with their corresponding forms of implementation:

Tabel 1. Teachers Strategies in Implementing Nature Based Inclusive Education

No	Teacher’s Strategy	Form of Field Implementation
1.	Inclusive Cooperative Learning (Full Inclusion Model)	All students, including those with special needs, learn together in one regular classroom without segregation. Activities are conducted outdoors through nature observation, planting and watering practices, the use of natural materials as learning media, and ecosystem exploration. The teacher organizes learning that promotes engagement, collaboration, and social interaction among students.
2.	Assistance for Students with Special Needs (SEN) in Each Classroom	Each class has a support teacher who assists students with special needs (SEN) in adapting during learning activities. The assistant provides individual support in understanding instructions, managing emotional stability, and adjusting learning activities to ensure that all students, including those with special needs, can participate effectively.
3.	Reflective Reinforcement	Teachers and the school hold joint reflection sessions to evaluate the experiences, values, and lessons learned. During these reflections, students are also provided with reinforcement sessions to strengthen their understanding and internalization of the learning outcomes.

Source: field observations and interviews, 2025.

Based on Table 1 above, during the implementation stage, teachers carry out learning activities that connect real-life experiences with the learning material, such as environmental observation, planting practice, exploration of the surrounding nature and ecosystems, as well as outdoor educational games that utilize natural media. These activities not only enhance students’ cognitive abilities but also strengthen social skills such as cooperation, communication, and empathy among students. In this context, as described by Kolb, knowledge is acquired through a cycle of concrete experience, reflection, abstract conceptualization, and active experimentation.

The teacher acts as a mediator, helping students reflect on their experiences and connect them with social and environmental values (Wakhidiani, 2023).

Based on these principles, teachers then implement various strategies that emphasize the active participation of all students within an inclusive learning environment. These strategies are designed not only to achieve academic goals but also to ensure that every learner, including children with special needs (CWSN), has equal learning opportunities through direct experiences alongside their peers. Based on the observations, there are three main strategies used by teachers in developing nature-based inclusive learning, namely: Inclusive Cooperative Learning, Assistance for CWSN in Each Class, and Reflective Reinforcement. These three strategies serve as the foundation for creating a collaborative, humanistic, and equitable learning atmosphere within the madrasah environment.

Teachers apply the Inclusive Cooperative Learning model (Full Inclusion Model) by involving all students including children with special needs (CWSN) in the same regular classroom without any segregation. This strategy fosters collaboration and active participation among students through various nature-based activities, such as environmental observation, planting practice, and exploration of learning resources around the school. Throughout the process, students learn to respect one another, work together, and assist peers who experience difficulties. These activities also help cultivate empathy and a sense of responsibility toward both the environment and fellow students, creating a more open, dynamic, and inclusive learning atmosphere.



Figure 1: The Learning Process in the Full Inclusion Model

The implementation of nature-based learning in the madrasah is supported by the presence of a Classroom Assistant Teacher (GPK) who helps students with special needs (CWSN) adapt during the learning process alongside their peers. This assistance is provided personally to help students understand instructions, manage emotions, and participate in group activities. The assistant teacher works collaboratively with the classroom teacher to adjust learning activities so that they remain responsive and accessible to each student's individual needs. The support provided is not restrictive; rather, it encourages independence and self-confidence among CWSN, enabling them to learn and interact actively with their classmates.



Figure 2: Classroom Support by GPK in Each Class

After completing outdoor learning activities, teachers conduct a strengthening reflection session with all students. This activity serves as a space for learners to share their experiences,

opinions, and values gained throughout the nature-based learning process. Through reflection, students are encouraged to recognize the meaning behind each experience, reinforcing empathy, and fostering a sense of responsibility toward the environment and others. The reflection session also strengthens social relationships among students and helps them understand the importance of cooperation and care in daily life. These three strategies demonstrate that teachers focus not only on knowledge transfer but also on building an inclusive and equitable school culture. The implementation of these strategies transforms nature-based learning into a living space that harmoniously integrates the cognitive, social, and moral dimensions of students ultimately realizing an education that is just, humanistic, and sustainable.

In addition, teachers apply differentiation strategies and individualized support during outdoor learning activities. Students with special needs receive additional assistance from both the support teacher and their peers (peer support) to ensure they can actively participate in every activity. This principle reflects the implementation of the Universal Design for Learning (UDL) proposed by Meyer, Rose, and Gordon, which emphasizes that the learning process must provide multiple means of representation and expression so that all students can achieve optimal learning outcomes (Chumairo et al., 2022). This approach ensures that no student is left behind or marginalized in the learning process, thereby allowing the values of equity and justice to be genuinely implemented in everyday educational practice.



Figure 3: Peer Support Differentiation in Environmental Education Learning

However, the findings also indicate that teachers face several challenges in implementing nature-based inclusive learning. The first challenge lies in the limited availability of facilities and supporting infrastructure. Not all schools possess adequate open spaces or resources to effectively conduct outdoor learning activities. Therefore, teachers must be innovative by utilizing their immediate surroundings such as schoolyards, small gardens, or simple plots of land as learning media. This is consistent with the findings of UNESCO (United Nations Educational, Scientific and Cultural Organization), which state that resource limitations remain one of the main obstacles to the comprehensive implementation of inclusive education in developing countries (Lengkong et al., 2025).

The second challenge relates to time management and curriculum adjustment. Outdoor learning activities often require more time for preparation, implementation, and assessment, while curriculum demands must still be met. Teachers are therefore required to integrate cross-thematic learning so that lessons remain relevant and efficient. In addition, teachers' competence in differentiation and instructional adaptation is a crucial factor. Not all teachers have sufficient experience or training in managing heterogeneous inclusive classrooms. This underscores the importance of continuous professional development to enhance teachers' ability to design learning strategies that are responsive to the individual needs of students.

Another factor influencing the success of nature-based inclusive learning is social support and parental involvement. Some parents still perceive outdoor activities as merely recreational rather than as an integral part of the educational process. As a result, their level of participation in supporting school programs is not yet optimal. According to Bronfenbrenner's ecological

systems theory, the success of education is strongly influenced by the interaction among various systems particularly the harmonious relationship between the school, family, and community (Mujahidah, 2015). Therefore, synergy among these three components becomes a crucial factor in strengthening inclusive and equitable educational practices.

Despite various limitations, teachers continue to demonstrate a strong commitment to the principles of inclusivity by cultivating creativity and professional reflection in their teaching practice. They act not merely as transmitters of knowledge, but as facilitators who nurture human values, equality, and empathy among students. Ultimately, nature based inclusive learning becomes a space for students to discover themselves, understand others, and appreciate diversity in their surroundings. Through these strategies, the goal of educational justice is realized not only in terms of access but also in ensuring equal quality and learning experiences for all students.

D. CONCLUSION

The teacher's strategy in developing inclusive education based on language at MIS Bilingual Al-Ikhlas Kepanjen highlights important contributions for the implementation of inclusive education. This study indicates that the strategic model used by the teacher focuses on three main aspects: collaboration facilitation, learning based on language acquisition in the classroom, and social interaction that promotes empathy. Through these three perspectives, the teacher not only creates a space for all students to participate, whether they are regular students or students with special needs, but also successfully develops social norms such as teamwork, caring, responsibility, and environmental awareness. With inclusive school policies and individual student participation, alam-based education functions as a pedagogical approach that can integrate academic progress with the development of social and emotional character in human-centered learning environments.

Despite the favorable effects of this technique, a number of problems still need to be resolved. Obstacles that impede optimal performance include the need to modify the curriculum to better accommodate inclusive demands, the lack of outdoor facilities that are accessible to those with disabilities, and the experience of teachers and specialized helpers in transforming nature-based activities. Students' social communication also emphasizes the necessity of creating interaction tactics that adhere to social learning concepts. Nonetheless, signs of empathy, collaboration, and social responsibility that surfaced throughout the educational process indicate that this strategy has a great potential to offer inclusive education that is flexible and adaptable.

The presentation of an empirical model of teaching techniques in nature-based inclusive learning, which can serve as a foundation for creating comparable practices in other educational settings, is the study's primary contribution. Based on these results, more study is advised to enhance and expand this model using a study and Development (R&D) strategy, especially in creating teacher training materials and useful recommendations that might aid in the administration of inclusive outdoor learning. Additionally, in order to make this model easier to copy and use in a wider educational setting, more research may examine how the community supports the sustainability of nature-based learning methods. It is intended that with more research, nature-based inclusive learning would become a more successful strategy for creating a learning environment that is fair, sustainable, and sensitive to the diversity of pupils.

REFERENCES

- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Anam, S. K. (2025). Sekolah Alam dan Pendidikan Karakter Islami: Studi Kasus TK Alam Jabalussalam dalam Menanamkan Nilai Akhlak dan Kewirausahaan Sholih Khudin Anam. *Journal Scientific of Mandalika (Jsm) e-ISSN*, 6(4), 2809–0543.

- Ardiansyah, Risnita, & Jailani, M. S. (2023). Teknik Pengumpulan Data Dan Instrumen Penelitian Ilmiah Pendidikan Pada Pendekatan Kualitatif dan Kuantitatif. *Jurnal IHSAN: Jurnal Pendidikan Islam*, 1(2), 1–9. <https://doi.org/10.61104/ihsan.v1i2.57>
- Candra, M. (2025). Belajar IPA Dari Alam: Strategi Observasi Lingkungan Untuk Menumbuhkan Kepedulian Siswa. *Intelektual: Jurnal Ilmiah Multidisiplin Mahasiswa Dan Akademisi*, 1, 2. <https://doi.org/https://doi.org/10.64690/intelektual.v1i2.146>
- Chumairo, P. Z., Efendi, M., Samawi, A., Hidayaturrehman, D., Ediyanto, E., & Sunandar, A. (2022). Game Interaktif Berbasis Universal Design Learning Bagi Siswa Slow Learner Di Sekolah Inklusi. *Jurnal Pendidikan (Teori Dan Praktik)*, 6(2), 123–128. <https://doi.org/10.26740/jp.v6n2.p123-128>
- Danniels, E., & Pyle, A. (2023). Inclusive Play-Based Learning: Approaches from Enacting Kindergarten Teachers. *Early Childhood Education Journal*, 51(7), 1169–1179. <https://doi.org/10.1007/s10643-022-01369-4>
- Darwis, M. (2016). Paradigma Baru Pendidikan dalam Perspektif Pemikiran Paulo Freire. *Fitra*, 2(2), 62–68. <https://www.jurnal.staitapaktuan.ac.id/index.php/fitra/article/view/27>
- Ermawati. (2008). *Mengenal Lebih Jauh Sekolah Inklusi*. Refika Aditama.
- Haryanti, D. (2020). Pengelolaan Kelas Inklusi Melalui Metode Belajar Bersama Alam (MBBA) di Sekolah Alam Bangka Belitung. *Tarbawy: Jurnal Pendidikan Islam*, 7(2), 128–136. <https://doi.org/10.32923/tarbawy.v7i2.1464>
- Hendayati, D., Caroline, & Firmansyah. (2025). Pendidikan Inklusif Yang Berkeadilan: Analisis Literatur dan Implikasinya untuk Kebijakan Pendidikan. *Jurnal Ilmiah Edukatif*, 11(01), 26–36. <https://doi.org/https://doi.org/10.37567/jie.v11i1.3543>
- Hikmatunnisa, H., Lathifah, Z. K., & Laeli, S. (2024). Peran Guru Dalam Penerapan Metode Pembelajaran Experiential Learning Untuk Meningkatkan Keaktifan Bangkok Thailand a Teacher ' S Role in Application Experiential Learning Methods in Increasing Student Learning Activity in. *AL –KAFF: Jurnal Sosial Humaniora*, 2(6), 585–596. <https://doi.org/https://doi.org/10.30997/alkaff.v2i6.15654>
- Iswahyudi, Muhammad Subhan, Irianto, Irianto, Salong, Amjad, Nurhasanah, Nurhasanah, Leuwol, Ferdinand Salomo, Januaripin, Muhamad, & Harefa, E. (2023). *Kebijakan Dan Inovasi Pendidikan: Arah Pendidikan di Masa Depan. PT. Sonpedia Publishing Indonesia*. PT. Sonpedia Publishing Indonesia.
- Jardinez, M. J., & Natividad, L. R. (2024). The The Advantages and Challenges of Inclusive Education: Striving for Equity in the Classroom. *Shanlax International Journal of Education*, 12(2), 57–65. <https://doi.org/10.34293/education.v12i2.7182>
- Jordan, C., & Chawla, L. (2019). A coordinated research agenda for nature-based learning. *Frontiers in Psychology*, 10(MAR), 1–10. <https://doi.org/10.3389/fpsyg.2019.00766>
- Kelly, O., Buckley, K., Lieberman, L. J., & Arndt, K. (2022). Universal Design for Learning - A framework for inclusion in Outdoor Learning. *Journal of Outdoor and Environmental Education*, 25(1), 75–89. <https://doi.org/10.1007/s42322-022-00096-z>
- Knight, J., Schultz, C., Stonehouse, P., Johnson, C. W., Howard, J., Williams, Y., Harrington, A., & Warner, E. (2025). How nature-based learning impacts teachers: Discoveries for well-being in and with the project EXPLORE community. *Interdisciplinary Journal of Environmental and Science Education*, 21(1), e2505. <https://doi.org/10.29333/ijese/15813>
- Komarudin, K., & Kaeni, N. F. (2023). The Obstacles of Inclusive Education Implementation in Indonesia: A Systematic Review. *GUIDENA: Jurnal Ilmu Pendidikan, Psikologi, Bimbingan Dan Konseling*, 12(3), 382. <https://doi.org/10.24127/gdn.v12i3.6537>
- Kurniawan, K. (2025). Implementasi Kurikulum Inklusif Untuk Menanamkan Nilai Toleransi Dan Anti-Radikalisme Di Sekolah Dasar. *Salimiya: Jurnal Studi Ilmu Keagamaan Islam*, 6(2), 638–650. <https://doi.org/10.58401/salimiya.v6i2.2025>
- Laksita, I. N. H., Meidayanti, I., Anggraeni, A., Apriana, W. I., Ariyadi, D. H., & Muhtarom, T. (2025). Implementasi Kurikulum Alam Dalam Mengembangkan Minat , Bakat , Serta Kepedulian Peserta Didik Sekolah Citra Alam Yogyakarta. *PESHUM: Jurnal Pendidikan, Sosial Dan Humaniora*, 4(2), 2368–2378.

- Lengkong, Jeffry S. J., Marisca, A. B., Sadsuitubun., Rambitan, B. F., Sumual, S. Y., Wkur, N. (2025). Perbandingan Sistem Pendidikan Inklusif Di Jepang Dan Indonesia : Pendidikan Untuk Anak Berkebutuhan Khusus. *Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, 10(01), 1–23. <https://doi.org/https://doi.org/10.36989/didaktik.v11i01.4668>
- Matthew B. Miles, A Michael Huberman, J. S. (2014). *Qualitative Data Analysis A Methods Sourcebook*. Sage Publicatin.
- Mujahidah. (2015). Implementasi Teori Ekologi Bronfenbrenner dalam Membangun Pendidikan Karakter yang Berkualitas. *Lentera*, IXX(2), 174. <https://doi.org/https://doi.org/10.21093/lj.v17i2.439>
- Nadhiroh, U., & Ahmadi, A. (2024). 14072-39141-1-Pb. *Ilmu Budaya: Jurnal Bahasa, Sastra, Seni, Dan Budaya*, 8(2008), 11–22.
- Parnawi, A., & Syahrani, M. (2024). Pendidikan Inklusif dalam Islam Untuk Membangun Kesetaraan dan Keadilan. *Arriyadhah*, 21(1), 79–87.
- Riswanto, R. (2025). *Refleksi implementasi kurikulum merdeka dalam perspektif pendidikan berkeadilan*. 25(2), 167–178. <https://doi.org/10.21831/hum.v25i2.80402.167-178>
- Saadati, B. A., & Sadli, M. (2019). Implementasi Pendidikan Inklusi Berbasis Pengembangan Diri Di Sekolah Alam Jogja Green School. *El Midad*, 11(2), 117–132. <https://doi.org/10.20414/elmidad.v11i2.1898>
- Septiano, F. A. B., & Sasono, S. (2025). Protecting Children's Rights through Inclusive Schools for Students with Special Needs: Legal and Phenomenological Perspectives. *Indonesian Journal of Community and Special Needs Education*, 5(2), 121–136.
- Sommerfeld, T. L. (2021). *How Can Nature-Based Learning Support Healthy Overall Development Of Preschoolers In Early Childhood Education?* Concordia University, St. Paul.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta Bandung.
- Vidal-Esteve, M. I., & Kossyvaki, L. (2024). The pillars of inclusive education for students with ASD: a scoping review based on the case of Spain. *International Journal of Developmental Disabilities*, 70(8), 1333–1342. <https://doi.org/10.1080/20473869.2023.2173837>
- Wakhidiani, D. (2023). Pengaruh Model Experiential Learning Terhadap Aktivitas dan Hasil Belajar Siswa pada Pembelajaran Terpadu. *Media Informasi*, 32(2), 204–213.
- Wang, T., Deng, M., & Tian, G. (2025). Facilitating teachers' inclusive education intentions: the roles of transformational leadership, school climate, and teacher efficacy. *Humanities and Social Sciences Communications*, 12(1), 1–9. <https://doi.org/10.1057/s41599-025-04977-8>
- Zulfriman, R., Kustanti, M., & Amelia, R. (2024). Implementasi Metode Outdoor Learning dalam Membentuk Lingkungan Pembelajaran yang Efektif dan Menyenangkan. *Jurnal Pendidikan Dan Riset*, 2(2), 70–76.